

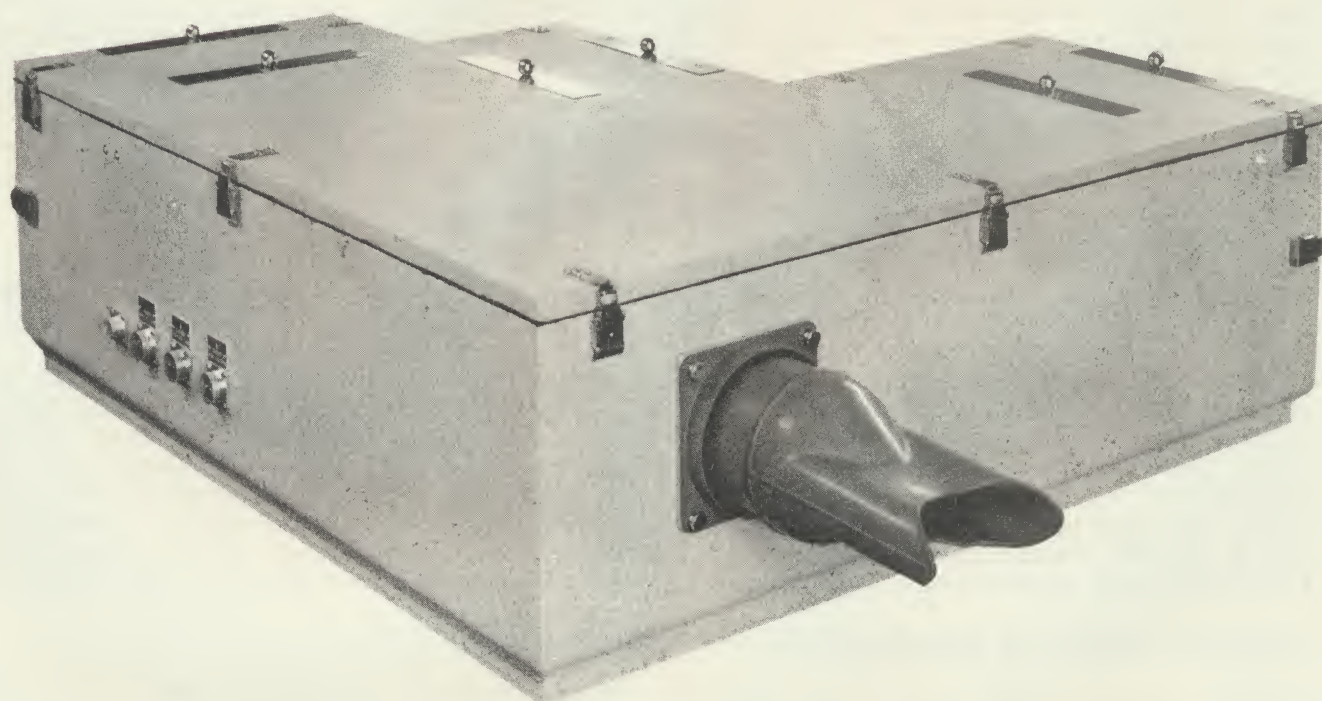
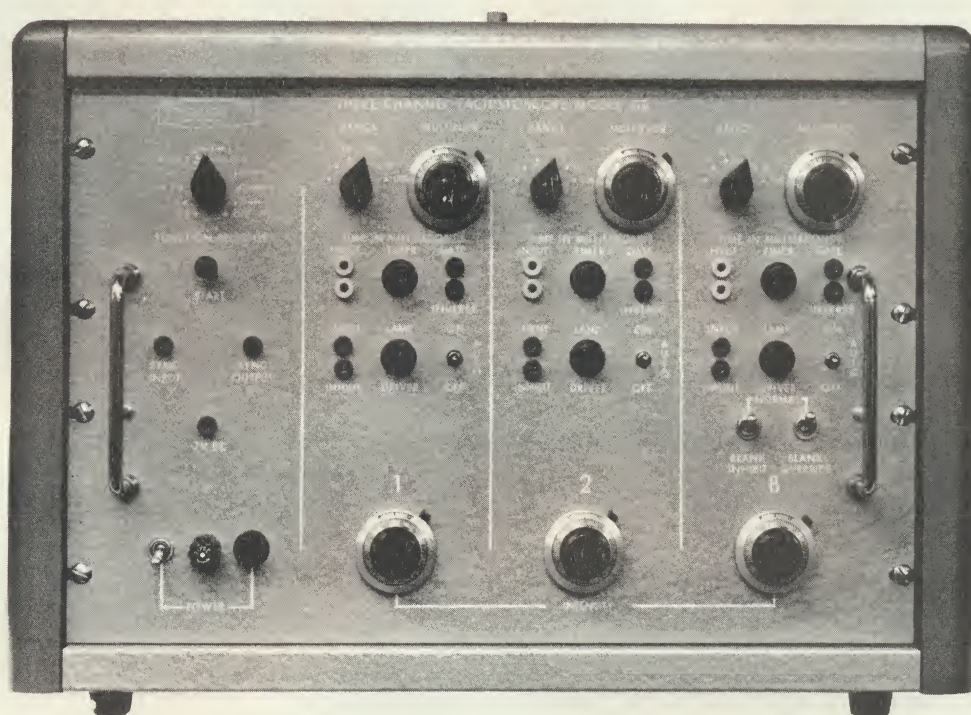
SCIENTIFIC PROTOTYPE MFG. CORP.



PHONE: AREA CODE 212
368-6000

615 W. 131 STREET, NEW YORK, N.Y. 10027

THREE CHANNEL TACHISTOSCOPE MODEL GB



(over)

The SCIENTIFIC PROTOTYPE three channel tachistoscope, Model GB, is the finest standard three channel tach available. This unit is the standard of comparison for tachistoscopes and is widely used in major laboratories throughout the world.

The three channel Dodge optical system contains three front surface mirrors: two combine the three channels; the third provides color correction. The two combining mirrors are provided with two axis pivoted mounts to permit exact centering of the fields. A separate mask with four independently adjustable edges is provided to mask each field and aid in the removal of visual cues. Two additional fully adjustable intermediate masks are provided to further reduce cues from box reflections.

5" x 7" stimulus cards, mounted in stainless steel holders, are manually inserted into each of the three fields on moveable tracks which may be adjusted to equalize the apparent viewing distance of all three channels. A separate 5" x 7" filter holder is provided for each channel to permit the insertion of polaroid material, color filters or neutral density filters (to extend the range of intensity downward beyond the approximately 1 log unit range provided by the front panel intensity controls). The filter holders may be used with transparent stimulus material, if a white card is inserted in the normal stimulus location, although higher brightness can be provided by using the normal stimulus position and auxilliary back illuminators.

There are two lamps per field to provide uniform illumination (approximately 20 foot lambert maximum white card brightness - sufficient for color vision experiments). The rise and fall times are approximately 0.005msec and each lamp is provided with a separate precision constant current control system which employs a regulated reference supply. Ignition voltage is approximately 1000 VDC to provide rapid turn-on without using inductors, or capacitor trigger systems which limit the recycling rate. Control system compliance is over 600 VDC to eliminate changes in light output during thermal shifts which occur when a lamp is first ignited. A fitted viewing hood is provided to exclude ambient light.

The control unit provides three separate time interval generators covering 0.1 msec to 110 sec in six overlapping, direct reading ranges with an accuracy of $\pm 2\%$ of setting. Precision, ten turn lamp intensity controls are provided for each field. All logical inputs and outputs for both the timers and the lamp drivers are available at the front panel (including the lamp driver inhibit inputs). This permits patchcord modifications of internally provided sequences (ten are provided), connection to external programming equipment (series G or H), and provides control signals to external measuring equipment, such as time interval counters.

A built-in pulse generator provides the input interface between a manual push-button or external contact closure and the internal logic.

The GB tachistoscope is entirely solid state with the exception of the six vacuum tubes which act as lamp switches. All logic, power supply regulation, timing and lamp current control is performed by semi-conductors derated far beyond "worst case" design criteria. All critical power supply voltages are regulated to eliminate the effect of line voltage variations on either lamp brightness, or exposure duration. Hermetically sealed power transformers, computer grade filter capacitors, solid slug tantalum and mylar/paper timing capacitors, even military connectors and knobs, provide unmatched reliability and stability.

Shipping weight is approximately 365 pounds.

Price: (f.o.b. New York City) Model GB three channel tachistoscope \$ 2850.00

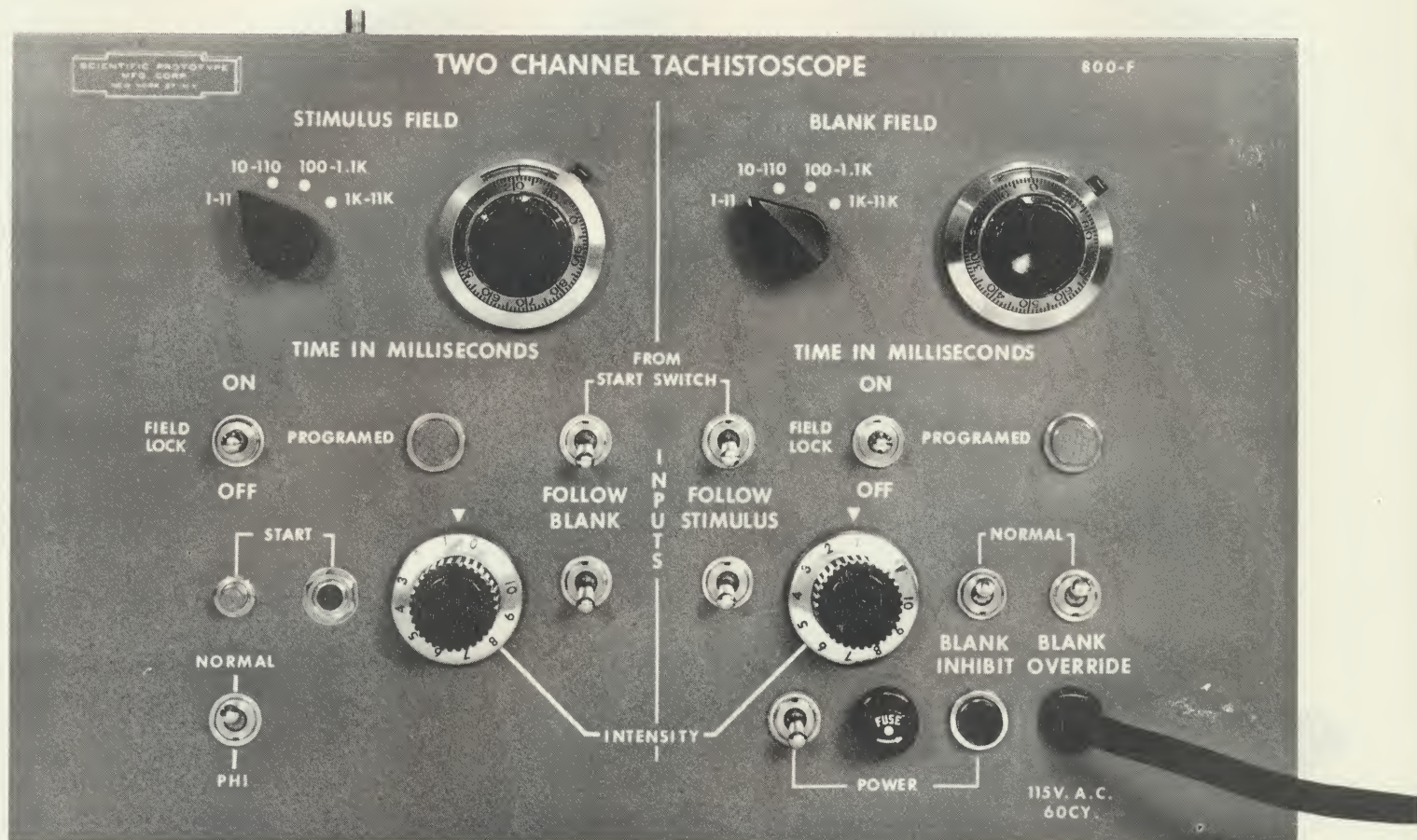
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A NEW COMPLETELY SOLID STATE
TWO CHANNEL TACHISTOSCOPE FROM SCIENTIFIC PROTOTYPE, MODEL 800-F



Two months ago SCIENTIFIC PROTOTYPE introduced the first completely solid state, two channel tachistoscope. The model number remained 800-E since the logical structure and panel layout remained identical to the earlier vacuum-tube/semi-conductor hybrid units.

Now the 800-E has been replaced by a logically superior unit, the new 800-F. All of the original flexibility of the 800-E has been retained. In the new unit, the added toggle switch on the lower left of the panel permits an entirely new operating mode. In the phi mode, the stimulus timer controls the duration of both stimulus and blank channel exposures and the blank timer controls the duration

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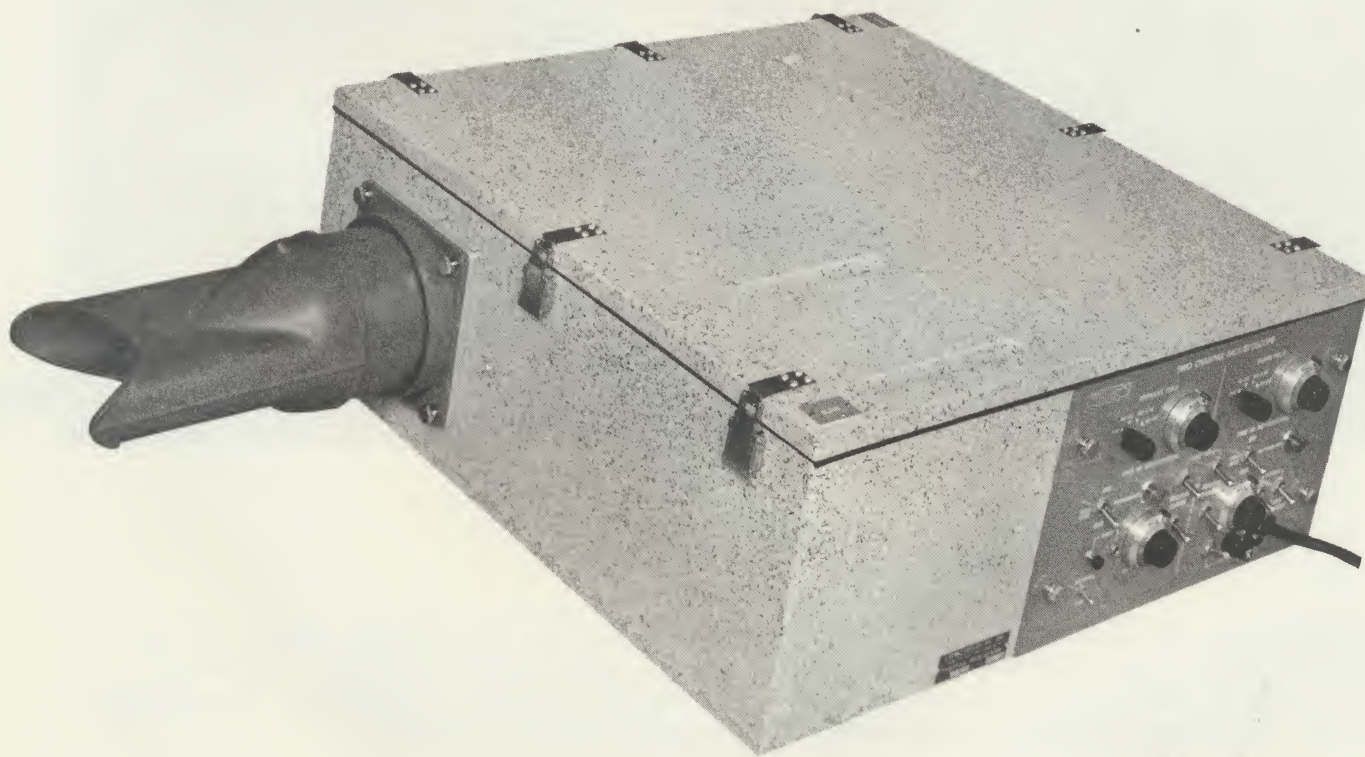
of the off time separating the exposures, allowing the following pattern to be generated.

Duration	Stimulus Time	Blank Time	Stimulus Time	Blank Time
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The 800-F permits demonstration of basic phi-phenomena without auxilliary equipment.

In addition to the phi equipment, which is now standard, precision (10 turn) lamp intensity controls may be specified in place of the standard single turn controls. These controls permit lamp currents to be set and reset with greater precision than ever before possible in a student tachistoscope.



800-F two channel tachistoscope
precision lamp intensity controls

\$ 895.00
60.00 additional

Prices are f.o.b. New York City

SCIENTIFIC PROTOTYPE MFG. CORP.

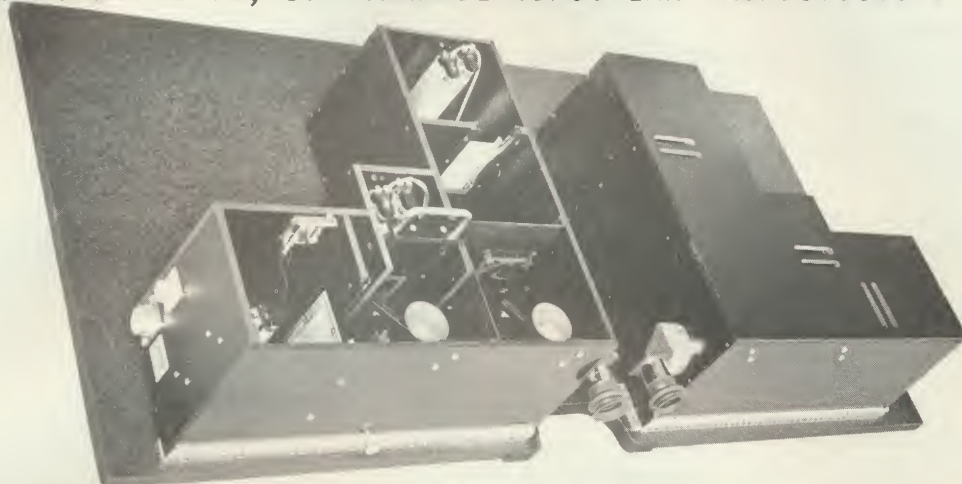


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NEW FROM SCIENTIFIC PROTOTYPE

A STANDARD MODEL GB, SIX CHANNEL BINOCULAR TACHISTOSCOPE



The optical system shown above - plus two standard model GB three channel electronic control systems (not shown) make up the first standard binocular tachistoscope to be placed in regular production.

The new unit utilizes 35mm standard transparencies and provides a maximum clear field brightness of approximately 50 foot lamberts, which makes the system ideal for color vision experiments. Internal lenses adjust the apparent viewing distance to approximately 30 feet, which is well within the comfortable focusing range of the majority of the population. A 7/8 inch aperture at the viewing heads makes eye position relatively non critical. Independent interocular angle and separation adjustments, externally adjustable mirror positioning and only a single adjustable framing mask make this the most convenient binocular tachistoscope available.

All of the superb performance characteristics of the three channel GB tachistoscopes have been retained, from magnesium flouride anti-reflection backing on the mirrors to precision multiturn lamp intensity controls. The logical flexibility has been greatly enhanced by the new sequences which can be generated by interconnecting the six time interval generators and six lamp drivers provided in the dual control systems.

A wide variety of accessories and modifications is available to further enhance the versatility of this remarkable instrument.

Six channel model GB tachistoscope \$ 7,100.00
Price f.o.b. New York City

BETTER PRODUCTS THROUGH RESEARCH FROM SCIENTIFIC PROTOTYPE

TECHNICAL SPECIFICATIONS

I- Optical System - twin 3 channel Dodge type

Viewing distance	15 inches
Apparent viewing distance (i.e. focal distance)	30 feet
Field dimensions	1½" horizontal 1" vertical
Maximum clear field brightness	50 ft. lambert (min)

Mirrors: 45/45 anti-reflection back coated

Mirror mounts:

- A) "Beam Splitters" - two axes, gear driver (external access provided)
- B) Color Corrector - fixed

Diffusers: double etched mylar

Masks:

- A) Reference Mask: fixed
- B) Matching Mask: adjustable (all 4 edges independent)

Viewing head: 90° with 7/8" clear aperture

Holders: 6 stimulus and 6 filter (35 mm slide)

Viewing axes: adjustable for interocular separation and angle

Electrical connections: 6 separate field connections,
2 interlock connections

Material: black Bakelite

Overall dimensions: approx. 4 ft. x 2 ft. x 1 ft.

Weight: approx. 50 lbs.

II- Control System - dual independent 3 channel units

A- Timers (3 x 2 = 6 total) solid state one-shot bootstrap reset

- 1- Range: 0.1 millisec. to 110 sec (6 overlapping)
- 2- Accuracy: ±2% of reading
- 3- Inputs: 2 (A.C. coupled - independent)
Outputs: 2 (gate & gate inverse - D.C. coupled)
- 4- Fan-out: 10 min.

B- Lamp drives (2 per channel) active series dissipative current feed-back type

- 1- Controls (1 per channel): 10 turn precision
- 2- Range: approx. 1 log unit
- 3- Accuracy (feed-back error): ±2%
- 4- Inputs: 2- normal input (D.C. coupled)
inhibit input (D.C. coupled)

C- Pulse generator - 1 per 3 channel control unit

30 cps rate limited go/no-go bounce filter for start pushbutton or external switch closure.

D- General construction - all solid state except for vacuum tube lamp switches

- transformers hermetically sealed
- (Mil-T-27A) filter capacitors
- computer grade
- timing capacitors mylar/paper or solid
- electrolyte tantalum
- connectors aircraft (type k)
- hardware: military (Jan) and industrial